

## **REMARKS**

Applicants request reconsideration of this application in view of the present Amendment.

In addition to the amendments discussed below, claims 1, 2, 6, 15, 20, 23, 25, 26, 28, 41, 42, 45, 48 and 50 are amended to define the invention more clearly.

### **I. 35 U.S.C. § 112**

Claims 2, 22, 28, 42 and 45 use the term "wide specification resin". Wide specification resins, as disclosed in Applicants' specification at page 9, lines 26-28, differ from on-specification resins in that a wide specification resin is out of the desired specification range for at least one physical property including, but not limited to, density, melt flow index and FRR. Withdrawal of the rejection of claims 2, 22, 28, 42 and 45 under 35 U.S.C. § 112, ¶ 2 is requested.

Claims 22, 24 and 50 appear to be mistakenly included in the rejection of claims 22-26, 28 and 47-50 under 35 U.S.C. § 112. Claims 23 and 26 are amended to recite "A plastic article" rather than "An extruded, molded, or formed plastic article". Withdrawal of the rejection of claims 22-26, 28 and 47-50 under 35 U.S.C. § 112, ¶ 2 is requested.

### **II. 35 U.S.C. § 102**

Claim 1 defines a polyethylene composition with particular characteristics that comprises a melt blend of the following three components:

- a first high density polyethylene (HDPE) resin with a melt flow index (MFI) of about 0.01 to about 0.2 and a density of about 0.941 to about 0.958 g/cm<sup>3</sup>;
- a second HDPE resin with an MFI of about 0.1 to about 1.5 and a density of about 0.957 to about 0.970 g/cm<sup>3</sup>; and
- a third polyethylene resin selected from the group consisting of linear low density polyethylene resins, linear medium density polyethylene resins, and mixtures thereof.

#### **A. Schellenberg does not anticipate claim 1.**

Component A of Schellenberg has an MFI that is entirely outside the claimed range for Applicants' first HDPE, and has a density that is entirely outside the claimed range for

Applicants' second HDPE. Therefore, Schellenberg's component A does not correspond to either the first or the second HDPE of claim 1.

Component B of Schellenberg has a density that slightly overlaps the claimed ranges for Applicants' first and second HDPE's, but no value of MFI is disclosed. Applicants respectfully submit that Schellenberg's component B does not inherently have the MFI recited for either of the two HDPE's of claim 1. This is because inherency under 35 USC §102 can be inferred only if the missing element must necessarily be present. The Office Action provides no extrinsic evidence to indicate that properties other than MFI could not be responsible for the properties of Schellenberg's total blend. Moreover, the Office Action infers inherency from the erroneous assertion that Schellenberg's components A and C are the same as Applicants'. As noted above, Schellenberg's component A is not the same, but instead is different from both of Applicants' two HDPE's. If any inherent values of MFI were thus indicated for Schellenberg's Component B, those values would necessarily differ in a countervailing manner in order to provide the same total blend properties. It follows that the MFI of Schellenberg's component B is not inherently the same as the claimed range of MFI for component B, but instead is inherently different from the claimed range of MFI for component B. Schellenberg thus fails to disclose each and every element of the invention recited in claim 1, and can not anticipate claim 1 under 35 USC §102.

**B. The remaining claims also are not anticipated by Schellenberg.**

Claims 2-4 and 6-15 depend from claim 1 and recite elements that further distinguish the invention from the disclosure of Schellenberg under 35 U.S.C. § 102(b).

Independent claims 23 and 41 recite a first HDPE with the same MFI and density requirements of the first HDPE of claim 1, and a second HDPE with the same MFI and density requirements of the second HDPE of claim 1. As discussed above for claim 1, Schellenberg does not disclose a melt blend of HDPEs with the MFI and density requirements of the first and second HDPEs of claim 1. Claims 23 and 41 thus recite elements that are not disclosed by Schellenberg and are, therefore, not anticipated by Schellenberg under 35 U.S.C. § 102(b).

Claims 25, 42-43, 47-48 and 50, which depend from independent claims 23 and 41, recite elements that distinguish the invention further from the disclosure of Schellenberg under 35 U.S.C. § 102(b).

Independent claims 20, 26 and 44 recite a high molecular weight HDPE with the same MFI and density requirements of the first HDPE of claim 1, and a homopolymer HDPE with the same MFI and density requirements of the second HDPE of claim 1. As discussed above for claim 1, Schellenberg does not disclose the HDPEs with the MFI and density requirements of the first and second HDPEs of claim 1. Accordingly, claims 20, 26 and 44 also recite elements that are not disclosed by Schellenberg and are not anticipated by Schellenberg under 35 U.S.C. § 102(b).

Claims 21-22, 28, 45-46 and 49, which depend from independent claims 20, 26 and 44, recite elements that distinguish the invention further from the disclosure of Schellenberg under 35 U.S.C. § 102(b).

### **III. 35 U.S.C. § 103(a)--Schellenberg**

As discussed above for claim 1, Schellenberg does not disclose the HDPEs with the MFI and density requirements of the first and second HDPE's of claim 1. Therefore, regardless of whether it is a matter of engineering choice to employ the presently claimed resins in the materials of Schellenberg, the subject matter defined "as a whole" in claims 2, 22, 28, 42 and 45, which depend from claim 1, could not have been made obvious by Schellenberg under 35 U.S.C. § 103(a). Instead, each of these claims recites elements that further distinguish the invention from the prior art under 35 U.S.C. § 103(a).

### **IV. 35 U.S.C. § 103(a)--Saeda**

Claim 1 recites a melt blend of **three** polyethylene resins as outlined above. Saeda does not teach or suggest the use of three polyethylene resins.

Saeda discloses a mixture of only **two** polyethylene resins. Saeda's component A is a high molecular weight low density polyethylene (*see* Saeda p. 2, §3, line 6). It is not a high density polyethylene resin like either of Applicants' first or second high density polyethylene resins. Saeda's component B is a single low molecular weight high density polyethylene resin (*see* Saeda p. 2, §3, lines 4-5). The low molecular weight polymers present in component B form an integral part of component B and are not a third component in addition to component B. Saeda provides a person of ordinary skill in the art with no suggestion or motivation to modify

component B by separating the low molecular weight polymers into a third component. Further, Saeda provides no suggestion or motivation to combine three polyethylene resins.

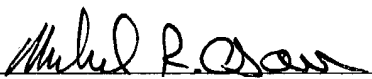
Claim 1 thus recites elements that are neither taught nor suggested by Saeda and is, therefore, not made obvious by Saeda under 35 U.S.C. § 103(a). Claims 2-4 and 6-15, which depend from claim 1, recite elements that distinguish the invention further from the disclosure of Saeda under 35 U.S.C. § 103(a).

Independent claims 20, 23, 26, 41 and 44 also recite a melt blend of three polyethylene resins. As discussed above for claim 1, Saeda does not teach or suggest a melt blend of three polyethylene resins. Accordingly, claims 20, 23, 26, 41 and 44 recite elements that are neither taught nor suggested by Saeda, and are not made obvious by Saeda under 35 U.S.C. § 103(a). Claims 21-22, 25, 28, 42-43 and 45-50, which depend from claims 20, 23, 26, 41 and 44, recite elements that distinguish the invention further from the disclosure of Saeda under 35 U.S.C. § 103(a).

#### **V. Conclusion**

Applicants respectfully submit that the present Amendment places the application in condition for allowance, and allowance is requested.

Respectfully submitted,

  
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